1981 Subject Index

All of the articles in the Forest Products Journal, *Volume 31, are listed both by subject and by author. The Subject Index is organized according to the FPRS Division and Technical Committee structure.*

The Author Index lists senior author entries which give complete information for the article, and coauthor entries which refer back to the senior author.

Reprints of most articles are available at $2 each, minimum $5, plus 10% shipping and handling. Bulk rates are also available. When ordering, please give reprint numbers. A check or money order must accompany each order.

FUNDAMENTAL DISCIPLINES DIVISION

Biology

Influence of Wood Structure on Seasoning and Gluing: Application of Wood Anatomy in Research and Development, G.A. Grozdits and G. Chauret, 2:28-33 (No. 6174).

Chemistry

Chemicals From Biomass: Present Status, I.S. Goldstein, 10:63-68 (No. 6302).

Emission of Formaldehyde by Particleboard: Effect of Ventilation Rate and Loading on Air-Contamination Levels, G.E. Myers and M. Nagaoka, 7:39-44 (No. 6211).

Potential Role of Lignin in Tomorrow's Wood Utilization Technologies, W.G. Glasser, 3:24-29 (No. 6159).

Wood Engineering & Mechanical Properties

Compressive Strength of One- and Two-Ply Laminated Timbers, R.C. Moody, 5:47-50 (No. 6071).

Humidity and Temperature Effects on MOR and MOE of Hard Maple-Veneered Medium Density Fiberboard, P. Chow and M.R. Redmond, 6:54-58 (No. 6206).

Influence of Wood Furnish Type on Properties of Oriented Strand Panels, M.S. Filho, 9:43-52 (No. 6099).

Laminated Veneer Lumber Made From Plantation-Grown Conifers, J.P. Stump, L.A. Smith, and R.L. Gray, 4:34-40 (No. 5967).

Portable E-Tester for Selecting Structural Component Lumber, D.H. Percival, 2:39-42 (TN-427).

Prediction of Bending Strength of Yellow-poplar 2 by 4's From Estimated Strength Ratios, C.B. Koch, 7:53-55 (No. 6138).

Proofloading of Finger-Joints for Glulam Timber, R.E. Eby, 1:37-41 (No. 6165).

Rapid Method to Determine Internal Bond and Density Variations of Particleboard, L. Knowles, 12:51-53 (No. 6242).

Recommended Bearing Stresses for Design in Light-Frame Construction, D.A. Fergus, J.F. Senft, and S.K. Suddarth, 4:50-57 (No. 6131).

Reinforcement of Wood With Fiberglass, F.D. Spaun, 4:26-33 (No. 6203).

Tensile Strength of One-, Two-, and Three-Ply Glulam Members of 2 by 6 Douglas-fir, J. Peterson, G. Madson, and R.C. Moody, 1:42-48 (No. 6091).

MANAGEMENT

Economics & Financial Management

Comparative Economics of Manufacturing Composition Boards From Dead Timber, T.M. Maloney, 5:28-36 (No. 6187).

Economic Desirability of Using Wood as a Fuel for Steam Production, F.-B. Lin, 1:31-36 (No. 6135).

Economics of Modifying Harvesting Systems to Recover Energy Wood, W.B. Stuart, C.D. Porter, T.A. Walbridge, and R.G. Oderwald, 8:37-42 (No. 6204).

Matching Projections of Supply and Demand for Forest Products in the U.S., R.W. Haynes and D.M. Adams, 10:77-81 (No. 6297).

State Death Tax Implications for Private Nonindustrial Forestry, S.C. Olson, H.L. Haney, Jr., and W.C. Siegel, 7:28-38 (No. 6239).

U.S. Wood-Based Industry Structure: Part I—Top 40 Companies, J. O'Laughlin and P.V. Ellefson, 10:55-62 (No. 6296-A).

U.S. Wood-Based Industry Structure: Part II—New Diversified Entrants, J. O'Laughlin and P.V. Ellefson, 11:26-33 (No. 6296-B).

U.S. Wood-Based Industry Structure: Part III—Strategic Group Analysis, J. O'Laughlin and P.V. Ellefson, 12:25-31 (No. 6296-C).

Wood-Based Industry: Trends in Selected Structural and Economic Factors Through 1977, E.M. Bilek and P.V. Ellefson, 10:48-54 (No. 6278).

Marketing

Can the Marketing of Wood Manufacturing Residue be Improved?, D. O'Brien and S.A. Sinclair, 3:30-32 (TN-429).

Production Management

Optimum Solution for the Cut-to-Size Particeboard Panel Problem, F. Mangalousis, E.J. Biblis, and C.R. White, 12:37-44 (No. 6249).

Sawmill Analysis Using Queuing Theory Combined With a Direct Search Optimizing Algorithm, H.F. Carino and J.L. Bowyer, 6:31-40 (No. 6199).

Quality Control

Defect Detection in Lumber: State of the Art, R. Szymani and K.A. McDonald, 11:34-44 (No. 6233).

Hardwood Lumber Grading Short Course Program Evaluation, D.L. Cassens and J.T. O'Leary, 6:26-30 (No. 6212).

Potential Structural Quality of Trenching Lumber, W.L. Galligan, B.A. Bendtsen, L.I. Knab, F.Y. Yokel, and J.F. Senft, 5:37-46 (No. 6169).

1981 Subject Index

All of the articles in the Forest Products Journal, *Volume 31, are listed both by subject and by author. The Subject Index is organized according to the FPRS Division and Technical Committee structure.*

The Author Index lists senior author entries which give complete information for the article, and coauthor entries which refer back to the senior author.

Reprints of most articles are available at $2 each, minimum $5, plus 10% shipping and handling. Bulk rates are also available. When ordering, please give reprint numbers. A check or money order must accompany each order.

FUNDAMENTAL DISCIPLINES DIVISION

Biology

Influence of Wood Structure on Seasoning and Gluing: Application of Wood Anatomy in Research and Development, G.A. Grozdits and G. Chauret, 2:28-33 (No. 6174).

Chemistry

Chemicals From Biomass: Present Status, I.S. Goldstein, 10:63-68 (No. 6302).

Emission of Formaldehyde by Particleboard: Effect of Ventilation Rate and Loading on Air-Contamination Levels, G.E. Myers and M. Nagaoka, 7:39-44 (No. 6211).

Potential Role of Lignin in Tomorrow's Wood Utilization Technologies, W.G. Glasser, 3:24-29 (No. 6159).

Wood Engineering & Mechanical Properties

Compressive Strength of One- and Two-Ply Laminated Timbers, R.C. Moody, 5:47-50 (No. 6071).

Humidity and Temperature Effects on MOR and MOE of Hard Maple-Veneered Medium Density Fiberboard, P. Chow and M.R. Redmond, 6:54-58 (No. 6206).

Influence of Wood Furnish Type on Properties of Oriented Strand Panels, M.S. Filho, 9:43-52 (No. 6099).

Laminated Veneer Lumber Made From Plantation-Grown Conifers, J.P. Stump, L.A. Smith, and R.L. Gray, 4:34-40 (No. 5967).

Portable E-Tester for Selecting Structural Component Lumber, D.H. Percival, 2:39-42 (TN-427).

Prediction of Bending Strength of Yellow-poplar 2 by 4's From Estimated Strength Ratios, C.B. Koch, 7:53-55 (No. 6138).

Proofloading of Finger-Joints for Glulam Timber, R.E. Eby, 1:37-41 (No. 6165).

Rapid Method to Determine Internal Bond and Density Variations of Particleboard, L. Knowles, 12:51-53 (No. 6242).

Recommended Bearing Stresses for Design in Light-Frame Construction, D.A. Fergus, J.F. Senft, and S.K. Suddarth, 4:50-57 (No. 6131).

Reinforcement of Wood With Fiberglass, F.D. Spaun, 4:26-33 (No. 6203).

Tensile Strength of One-, Two-, and Three-Ply Glulam Members of 2 by 6 Douglas-fir, J. Peterson, G. Madson, and R.C. Moody, 1:42-48 (No. 6091).

MANAGEMENT

Economics & Financial Management

Comparative Economics of Manufacturing Composition Boards From Dead Timber, T.M. Maloney, 5:28-36 (No. 6187).

Economic Desirability of Using Wood as a Fuel for Steam Production, F.-B. Lin, 1:31-36 (No. 6135).

Economics of Modifying Harvesting Systems to Recover Energy Wood, W.B. Stuart, C.D. Porter, T.A. Walbridge, and R.G. Oderwald, 8:37-42 (No. 6204).

Matching Projections of Supply and Demand for Forest Products in the U.S., R.W. Haynes and D.M. Adams, 10:77-81 (No. 6297).

State Death Tax Implications for Private Nonindustrial Forestry, S.C. Olson, H.L. Haney, Jr., and W.C. Siegel, 7:28-38 (No. 6239).

U.S. Wood-Based Industry Structure: Part I—Top 40 Companies, J. O'Laughlin and P.V. Ellefson, 10:55-62 (No. 6296-A).

U.S. Wood-Based Industry Structure: Part II—New Diversified Entrants, J. O'Laughlin and P.V. Ellefson, 11:26-33 (No. 6296-B).

U.S. Wood-Based Industry Structure: Part III—Strategic Group Analysis, J. O'Laughlin and P.V. Ellefson, 12:25-31 (No. 6296-C).

Wood-Based Industry: Trends in Selected Structural and Economic Factors Through 1977, E.M. Bilek and P.V. Ellefson, 10:48-54 (No. 6278).

Marketing

Can the Marketing of Wood Manufacturing Residue be Improved?, D. O'Brien and S.A. Sinclair, 3:30-32 (TN-429).

Production Management

Optimum Solution for the Cut-to-Size Particeboard Panel Problem, F. Mangalousis, E.J. Biblis, and C.R. White, 12:37-44 (No. 6249).

Sawmill Analysis Using Queuing Theory Combined With a Direct Search Optimizing Algorithm, H.F. Carino and J.L. Bowyer, 6:31-40 (No. 6199).

Quality Control

Defect Detection in Lumber: State of the Art, R. Szymani and K.A. McDonald, 11:34-44 (No. 6233).

Hardwood Lumber Grading Short Course Program Evaluation, D.L. Cassens and J.T. O'Leary, 6:26-30 (No. 6212).

Potential Structural Quality of Trenching Lumber, W.L. Galligan, B.A. Bendtsen, L.I. Knab, F.Y. Yokel, and J.F. Senft, 5:37-46 (No. 6169).

Research Management

Forestry Research Priorities of Various User Groups, J.E. de Steiguer and J.G. Massey, 10:86-88 (No. 6357).

PROCESSES DIVISION

Drying & Storage

Blue Staining in Ponderosa Pine Sapwood at Moderate and Low Temperatures, D.J. Miller and B. Goodell, 2:54-59 (No. 6166).

Design and Tests of a 500 BF Solar Kiln, P.Y.S. Chen, 3:33-38 (No. 6181).

Development of a Schedule for Jet-Drying Yellow-poplar, H.N. Rosen and R.E. Bodkin, 3:39-44 (No. 6176).

Effect of Weather on Dry Kiln Venting Losses, R.L. Little, 6:41-44 (No. 6182).

Energy Conservation in Wood Dryers Using Vent Air Energy Recovery Devices, A.C. Kent, H.N. Rosen, and D.A. Crotty, 2:43-49 (No. 6104).

General Drying Characteristics of Young-Growth Redwood Dimension Lumber, W.R. Smith and D.G. Arganbright, 4:44-49 (No. 6190).

Properties and Kiln-Drying Characteristics of Young-Growth Western Hemlock Dimension Lumber, C.J. Kozlik and J.C. Ward, 6:45-53 (No. 6198).

Shrinkage of Western Hemlock Heartwood After Conventional and High-Temperature Kiln-Drying, C. Kozlik, 12:45-50 (No. 6136).

Trials to Reduce Drying Time of Pencil Slats Using the Drying Effort Method, C.C. Cheng and D.G. Arganbright, 7:45-52 (No. 6228).

Gluing

Plywood Adhesives—Supply and Demand, T. Sellers, Jr., 10:82-85 (No. 6301).

Milling & Machining

Dependence of Particleboard Cut Edge Roughness on Sawtooth Wear, B.E. Klamecki, 4:41-43 (TN-430).

Pollution Abatement & Control

Performance and Annoyance Effects of Noise, F.M. Lamb, 1:48-53 (No. 6072).

Timber Production

Computer Simulation: A Method for Evaluating Log Scaling Procedures, K.D. Ramsing, 2:50-53 (No. 5957).

Economic Growth Goal for Timber in the Southeast, V.L. Robinson, A.A. Montgomery, and J.D. Strange, 10:69-76 (No. 6312).

Harvesting Analysis Technique: A Computer Simulation System for Timber Harvesting, W.B. Stuart, 11:45-53 (No. 6191).

How Many Chokers to Fly in Cable Thinnings? A Question for Simulation, C.B. LeDoux, 11:54-58 (No. 6232).

Trends in Pulpwood Logging Costs During the 1970s, C.C. Hassler, S.A. Sinclair, and D.J. Ferguson, 9:53-58 (No. 6223).

PRODUCTS DIVISION

Bark & Residues

Can the Marketing of Wood Manufacturing Residue be Improved?, D. O'Brien and S.A. Sinclair, 3:30-32 (TN-429).

Hardwood Lumber

Development of a Schedule for Jet-Drying Yellow-poplar, H.N. Rosen and R.E. Bodkin, 3:39-44 (No. 6176).

Hardwood Lumber Grading Short Course Program Evaluation, D.L. Cassens and J.T. O'Leary, 6:26-30 (No. 6212).

Prediction of Bending Strength of Yellow-poplar 2 by 4's From Estimated Strength Ratios, C.B. Koch, 7:53-55 (No. 6138).

Production of Eastern Cottonwood 2 by 4 Lumber, J.W. Funck, D.R. Prestemon, and D.W. Bensend, 1:54-57 (No. 6151).

Yield Comparisons Between 4/4 Lumber and SDR Studs From Small Woods-Run Yellow-poplar Logs, R.R. Maeglin, E.H. Bulgrin, and H.Y. Hallock, 3:45-48 (TN-425).

Laminated Wood, Components, & Engineered Structures

Comparative Economics of Manufacturing Composition Boards From Dead Timber, T.M. Maloney, 5:28-36 (No. 6187).

Compressive Strength of One- and Two-Ply Laminated Timbers, R.C. Moody, 5:47-50 (No. 6071).

Laminated Veneer Lumber Made From Plantation-Grown Conifers, J.P. Stump, L.A. Smith, and R.L. Gray, 4:34-40 (No. 5967).

Proofloading of Finger-Joints for Glulam Timber, R.E. Eby, 1:37-41 (No. 6165).

Reinforcement of Wood With Fiberglass, F.D. Spaun, 4:26-33 (No. 6203).

Tensile Strength of One-, Two-, and Three-Ply Glulam Members of 2 by 6 Douglas-fir, J. Peterson, G. Madson, and R.C. Moody, 1:42-48 (No. 6091).

Particleboard & Molded Products

Dependence of Particleboard Cut Edge Roughness on Sawtooth Wear, B.E. Klamecki, 4:41-43 (TN-430).

Emission of Formaldehyde by Particleboard: Effect of Ventilation Rate and Loading on Air-Contamination Levels, G.E. Myers and M. Nagaoka, 7:39-44 (No. 6211).

Fire Endurance of a Particleboard Decked Floor/Ceiling Assembly, J.B. Zicherman, 1:24-25 (TN-421).

Humidity and Temperature Effects on MOR and MOE of Hard Maple-Veneered Medium Density Fiberboard, P. Chow and M.R. Redmond, 6:54-58 (No. 6206).

Influence of Wood Furnish Type on Properties of Oriented Strand Panels, M.S. Filho, 9:43-52 (No. 6099).

Optimum Solution for the Cut-to-Size Particleboard Panel Problem, F. Mangalousis, E.J. Biblis, and C.R. White, 12:37-44 (No. 6249).

Rapid Method to Determine Internal Bond and Density Variations of Particleboard, L. Knowles, 12:51-53 (No. 6242).

Review: 1980 Particleboard Literature in Non-U.S. Journals, R.D. Ziegler, 8:55-58 (No. 6272).

Residential & Commercial Buildings

Adhesive-Bonded Shear Walls for CCA-Treated Wood Foundations, C.B. Vick, 9:34-38 (No. 6244).

Fire Endurance of a Particleboard Decked Floor/Ceiling Assembly, J.B. Zicherman, 1:24-25 (TN-421).

Pole and Pile Foundations for Residential Housing in New Zealand, J.C.F. Walker, 8:28-36 (No. 6195).

Potential Structural Quality of Trenching Lumber, W.L. Galligan, B.A. Bendtsen, L.I. Knab, F.Y. Yokel, and J.F. Senft, 5:37-46 (No. 6169).

Softwood Lumber

General Drying Characteristics of Young-Growth Redwood Dimension

1981 Subject Index

Lumber, W.R. Smith and D.G. Arganbright, 4:44-49 (No. 6190).

Properties and Kiln-Drying Characteristics of Young-Growth Western Hemlock Dimension Lumber, C.J. Kozlik and J.C. Ward, 6:45-53 (No. 6198).

Treated Wood Products

Fungicides to Prevent Sapstain and Mold on Hardwood Lumber, D.L. Cassens and W.E. Eslyn, 9:39-42 (No. 6227).

Multidisciplinary Approach to the Development of New Wood Preservatives, D.D. Nicholas, 9:28-33 (No. 6213).

Performance of Western Wood Species as Crossties in Mainline Railroad Track, D.J. Miller and P.R. Houghton, 5:51-58 (No. 6193).

Wood Fuel

Cost of Whole-Tree Chips for Energy—Louisiana Case Study, J.G. Massey, M.P. McCollum, and W.C. Anderson, 2:34-38 (No. 6188).

Economic Desirability of Using Wood as a Fuel for Stream Production, F.-B. Lin, 1:31-36 (No. 6135).

Economics of Modifying Harvesting Systems to Recover Energy Wood, W.B. Stuart, C.D. Porter, T.A. Waldbridge, and R.G. Oderwald, 8:37-42 (No. 6204).

Evaluating Feedstock Requirements for a 50-Megawatt Wood-Fired Electric Generating Plant, L.D. Garrett, 1:26-30 (No. 6149).

Potential for Compression Drying of Green Wood Chip Fuel, J.G. Haygreen, 8:43-54 (No. 6225).

Preharvest Drying of Logging Residues, K.E. Rogers, 12:32-36 (No. 6216).

PAPERS OF SPECIAL INTEREST

Chemicals From Biomass: Present Status, I.S. Goldstein, 10:63-68 (No. 6302).

Defect Detection in Lumber: State of the Art, R. Szymani and K.A. McDonald, 11:34-44 (No. 6233).

Forestry Research Priorities of Various User Groups, J.E. de Steiguer and J.G. Massey, 10:86-88 (No. 6357).

Influence of Wood Structure on Seasoning and Gluing: Application of Wood Anatomy in Research and Development, G.A. Grozdits and G. Chauret, 2:28-33 (No. 6174).

Multidisciplinary Approach to the Development of New Wood Preservatives, D.D. Nicholas, 9:28-33 (No. 6213).

Pole and Pile Foundations for Residential Housing in New Zealand, J.C.F. Walker, 8:28-36 (No. 6195).

Potential Role of Lignin in Tomorrow's Wood Utilization Technologies, W.G. Glasser, 3:24-29 (No. 6159).

Review: 1980 Particleboard Literature in Non-U.S. Journals, R.D. Ziegler, 8:55-58 (No. 6272).

State Death Tax Implications for Private Nonindustrial Forestry, S.C. Olson, H.L. Haney, Jr., and W.C. Siegel, 7:28-38 (No. 6239).

U.S. Wood-Based Industry Structure: Part I—Top 40 Companies, J. O'Laughlin and P.V. Ellefson, 10:55-62 (No. 6296-A).

U.S. Wood-Based Industry Structure: Part II—New Diversified Entrants, J. O'Laughlin and P.V. Ellefson, 11:26-33 (No. 6296-B).

U.S. Wood-Based Industry Structure: Part III—Strategic Group Analysis, J. O'Laughlin and P.V. Ellefson, 12:25-31 (No. 6296-C).

Wood-Based Industry: Trends in Selected Structural and Economic Factors Through 1977, E.M. Bilek and P.V. Ellefson, 10:48-54 (No. 6278).

1981 Author Index

A

Adams, D.M., *see* Haynes, R.W.

Anderson, W.C., *see* Massey, J.G.

Arganbright, D.G., *see* Cheng, C.C.

Arganbright, D.G., *see* Smith, W.R.

B

Bendtsen, B.A., *see* Galligan, W.L.

Bensend, D.W., *see* Funck, J.W.

Biblis, E.J., *see* Mangalousis, F.

Bilek, E.M., and P.V. Effefson, Wood-Based Industry: Trends in Selected Structural and Economic Factors Through 1977, 10:48-54 (No. 6278).

Bodkin, R.E., *see* Rosen, H.N.

Bowyer, J.L., *see* Carino, H.F.

Bulgrin, E.H., *see* Maeglin, R.R.

C

Carino, H.F., and J.L. Bowyer, Sawmill Analysis Using Queuing Theory Combined With a Direct Search Optimizing Algorithm, 6:31-40 (No. 6199).

Cassens, D.L., and J.T. O'Leary, Hardwood Lumber Grading Short Course Program Evaluation, 6:26-30 (No. 6212).

Cassens, D.L., and W.E. Eslyn, Fungicides to Prevent Sapstain and Mold on Hardwood Lumber, 9:39-42 (No. 6227).

Chauret, G., *see* Grozdits, G.A.

Chen, P.Y.S., Design and Tests of a 500 BF Solar Kiln, 3:33-38 (No. 6181).

Cheng, C.C., and D.G. Arganbright, Trials to Reduce Drying Time of Pencil Slats Using the Drying Effort Method, 7:45-52 (No. 6228).

Chow, P., and M.R. Redmond, Humidity and Temperature Effects on MOR and MOE of Hard Maple-Veneered Medium Density Fiberboard, 6:54-58 (No. 6206).

Crotty, D.A., *see* Kent, A.C.

D

de Steiguer, J.E., and J.G. Massey, Forestry Research Priorities of Various User Groups, 10:86-88 (No. 6357).

E

Eby, R.E., Proofloading of Finger-Joints for Glulam Timber, 1:37-41 (No. 6165).

Ellefson, P.V., *see* Bilek, E.M.

Ellefson, P.V., *see* O'Laughlin, J.

Ellefson, P.V., *see* O'Laughlin, J.

Ellefson, P.V., *see* O'Laughlin, J.

Eslyn, W.E., *see* Cassens, D.L.

F

Fergus, D.A., J.F. Senft, and S.K. Sud-

darth, Recommended Bearing Stresses for Design in Light-Frame Construction, 4:50-57 (No. 6131).
Ferguson, D.J., *see* Hassler, C.C.
Filho, M.S., Influence of Wood Furnish Type on Properties of Oriented Strand Panels, 9:43-52 (No. 6099).
Funck, J.W., D.R. Prestemon, and D.W. Bensend, Production of Eastern Cottonwood 2 by 4 Lumber, 1:54-57 (No. 6151).

G

Galligan, W.L., B.A. Bendtsen, L.I. Knab, F.Y. Yokel, and J.F. Senft, Potential Structural Quality of Trenching Lumber, 5:37-46 (No. 6169).
Garrett, L.D., Evaluating Feedstock Requirements for a 50-Megawatt Wood-Fired Electric Generating Plant, 1:26-30 (No. 6149).
Glasser, W.G., Potential Role of Lignin in Tomorrow's Wood Utilization Technologies, 3:24-29 (No. 6159).
Goldstein, I.S., Chemicals From Biomass: Present Status, 10:63-68 (No. 6302).
Goodell, B., *see* Miller, D.J.
Gray, R.L., *see* Stump, J.P.
Grozdits, G.A., and G. Chauret, Influence of Wood Structure on Seasoning and Gluing: Application of Wood Anatomy in Research and Development, 2:28-33 (No. 6174).

H

Hallock, H.Y., *see* Maeglin, R.R.
Haney, H.L., Jr., *see* Olson, S.C.
Hassler, C.C., S.A. Sinclair, and D.J. Ferguson, Trends in Pulpwood Logging Costs During the 1970s, 9:53-58 (No. 6223).
Haygreen, J.G., Potential for Compression Drying of Green Wood Chip Fuel, 8:43-54 (No. 6225).
Haynes, R.W., and D.M. Adams, Matching Projections of Supply and Demand for Forest Products in the U.S., 10:77-81 (No. 6297).
Houghton, P.R., *see* Miller, D.J.

K

Kent, A.C., H.N. Rosen, and D.A. Crotty, Energy Conservation in Wood Dryers Using Vent Air Energy Recovery Devices, 2:43-49 (No. 6104).
Klamecki, B.E., Dependence of Particleboard Cut Edge Roughness on Sawtooth Wear, 4:41-43 (TN-430).
Knab, L.I., *see* Galligan, W.L.
Knowles, L., Rapid Method to Determine Internal Bond and Density Variations of Particleboard, 12:51-53 (No. 6242).
Koch, C.B., Prediction of Bending Strength of Yellow-poplar 2 by 4's From Estimated Strength Ratios, 7:53-55 (No. 6138).
Kozlik, C., Shrinkage of Western Hemlock Heartwood After Conventional and High-Temperature Kiln-Drying, 12:45-50 No. (6136).
Kozlik, C.J., and J.C. Ward, Properties and Kiln-Drying Characteristics of Young-Growth Western Hemlock Dimension Lumber, 6:45-53 (No. 6198).

L

Lamb, F.M., Performance and Annoyance Effects of Noise, 1:48-53 (No. 6072).
LeDoux, C.B., How Many Chokers to Fly in Cable Thinnings? A Question for Simulation, 11:54-58 (No. 6232).
Lin, F.-B., Economic Desirability of Using Wood as a Fuel for Steam Production, 1:31-36 (No. 6135).
Little, R.L., Effect of Weather on Dry Kiln Venting Losses, 6:41-44 (No. 6182).

M

Madson, G., *see* Pęterson, J.
Maeglin, R.R., E.H. Bulgrin, and H.Y. Hallock, Yield Comparisons Between 4/4 Lumber and SDR Studs From Small Woods-Run Yellow-poplar Logs, 3:45-48 (TN-425).
Maloney, T.M., Comparative Economics of Manufacturing Composition Boards From Dead Timber, 5:28-36 (No. 6187).
Mangalousis, F., E.J. Biblis, and C.R. White, Optimum Solution for the Cut-to-Size Particleboard Panel Problem, 12:37-44 (No. 6249).
Massey, J.G., M.P. McCollum, and W.C. Anderson, Cost of Whole-Tree Chips for Energy—Louisiana Case Study, 2:34-38 (No. 6188).
Massey, J.G., *see* de Steiguer, J.E.
McCollum, M.P., *see* Massey, J.G.
McDonald, K.A., *see* Szymani, R.
Miller, D.J., and B. Goodell, Blue Staining in Ponderosa Pine Sapwood at Moderate and Low Temperatures, 2:54-59 (No. 6166).
Miller, D.J., and P.R. Houghton, Performance of Western Wood Species as Crossties in Mainline Railroad Track, 5:51-58 (No. 6193).
Montgomery, A.A., *see* Robinson, V.L.
Moody, R.C., Compressive Strength of One-and Two-Ply Laminated Timbers, 5:47-50 (No. 6071).
Moody, R.C., *see* Peterson, J.
Myers, G.E., and M. Nagaoka, Emission of Formaldehyde by Particleboard: Effect of Ventilation Rate and Loading on Air-Contamination Levels, 7:39-44 (No. 6211).

N

Nagaoka, M., *see* Myers, G.E.
Nicholas, D.D., Multidisciplinary Approach to the Development of New Wood Preservatives, 9:28-33 (No. 6213).

O

O'Brien, D., and S.A. Sinclair, Can the Marketing of Wood Manufacturing Residue be Improved?, 3:30-32 (TN-429).
Oderwald, R.G., *see* Stuart, W.B.
O'Laughlin, J., and P.V. Ellefson, U.S. Wood-Based Industry Structure: Part I —Top 40 Companies, 10:55-62 (No. 6296-A).
O'Laughlin, J., and P.V. Ellefson, U.S. Wood-Based Industry Structure: Part II—New Diversified Entrants, 11:26-33 (No. 6296-B).
O'Laughlin, J., and P.V. Ellefson, U.S. Wood-Based Industry Structure: Part III—Strategic Group Analysis, 12:25-31 (No. 6296-C).
O'Leary, J.T., *see* Cassens, D.L.
Olson, S.C., H.L. Haney, Jr., and W.C. Siegel, State Death Tax Implications for Private Nonindustrial Forestry, 7:28-38 (No. 6239).

P

Percival, D.H., Portable E-Tester for Selecting Structural Component Lumber, 2:39-42 (TN-427).
Peterson, J., G. Madson, and R.C. Moody, Tensile Strength of One-, Two-, and Three-Ply Glulam Members of 2 by 6 Douglas-fir, 1:42-48 (No. 6091).
Porter, C.D., *see* Stuart, W.B.
Prestemon, D.R., *see* Funck, J.W.

R

Ramsing, K.D., Computer Simulation: A Method for Evaluating Log Scaling Procedures, 2:50-53 (No. 5957).
Redmond, M.R., *see* Chow, P.
Robinson, V.L., A.A. Montgomery, and J.D. Strange, Economic Growth Goal for Timber in the Southeast, 10:69-76 (No. 6312).
Rogers, K.E., Preharvest Drying of Logging Residues, 12:32-36 (No. 6216).
Rosen, H.N., and R.E. Bodkin, Development of a Schedule for Jet-Drying Yellow-poplar, 3:39-44 (No. 6176).
Rosen, H.N., *see* Kent, A.C.

S

Sellers, T., Jr., Plywood Adhesives—Supply and Demand, 10:82-85 (No. 6301).

1981 Author Index

Senft, J.F., *see* Fergus, D.A.
Senft, J.F., *see* Galligan, W.L.
Siegel, W.C., *see* Olson, S.C.
Sinclair, S.A., *see* Hassler, C.C.
Sinclair, S.A., *see* O'Brien, D.
Smith, L.A., *see* Stump, J.P.

Smith, W.R., and D.G. Arganbright, General Drying Characteristics of Young-Growth Redwood Dimension Lumber, 4:44-49 (No. 6190).

Spaun, F.D., Reinforcement of Wood With Fiberglass, 4:26-33 (No. 6203).
Strange, J.D., *see* Robinson, V.L.
Stuart, W.B., Harvesting Analysis Technique: A Computer Simulation System for Timber Harvesting, 11:45-53 (No. 6191).

Stuart, W.B., C.D. Porter, T.A. Walbridge, and R.G. Oderwald, Economics of Modifying Harvesting Systems to Recover Energy Wood, 8:37-42 (No. 6204).

Stump, J.P., L.A. Smith, and R.L. Gray, Laminated Veneer Lumber Made From Plantation-Grown Conifers, 4:34-40 (No. 5967).
Suddarth, S.K., *see* Fergus, D.A.
Szymani, R., and K.A. McDonald, Defect Detection in Lumber: State of the Art, 11:34-44 (No. 6233).

V

Vick, C.B., Adhesive-Bonded Shear Walls for CCA-Treated Wood Foundations, 9:34-38 (No. 6244).

W

Walbridge, T.A., *see* Stuart, W.B.
Walker, J.C.F., Pole and Pile Foundations for Residential Housing in New Zealand, 8:28-36 (No. 6195).
Ward, J.C., *see* Kozlik, C.J.
White, C.R., *see* Mangalousis, F.

Y

Yokel, F.Y., *see* Galligan, W.L.

Z

Zicherman, J.B., Fire Endurance of a Particleboard Decked Floor/Ceiling Assembly, 1:24-25 (TN-421).
Ziegler, R.D., Review: 1980 Particleboard Literature in Non-U.S. Journals, 8:55-58 (No. 6272).

Wall and floor symposium

Continued from Page 17

Reducing air infiltration can result in significant savings in home energy consumption according to David Grimsrud, University of California. Based on results of air change measurements in various houses in several areas of the United States, Grimsrud proposed that this area needs immediate attention in retrofitting. He proposed that ventilation is not the solution to poor indoor air quality—rather the source of pollutants must be identified and dealt with. He said that low air change rates do not necessarily need to mean indoor air quality problems.

Don Percival of the University of Illinois concluded the third session by showing examples of field problems in light frame construction. He noted that many of these could have been avoided by following recommended procedures and closer attention to the control of moisture. Failure to understand the behavior of moisture results in costly replacement and unnecessary waste of the wood resource, he said. He believes that improved builder and homeowner education programs are needed.

Summary

Suddarth used six points to both summarize the information presented and challenge participants in the 2-1/2-day conference:

- Technical gains are apparent in terms of analytic capability and ability to deal with variation.
- Wood engineering will probably be forced into dealing with the LRFD design approach discussed by Goodman. Problems in load duration and combined loading need to be solved.
- Because floors are human contact surfaces, they need special dynamic considerations to deal with human response. Acceptability of innovative floor systems cannot be based on static analysis alone.
- Opposite requirements for energy-efficient and fire-safe construction must be resolved.
- Systems that require a high degree of onsite quality control, such as earth sheltering, must recognize that the quality of field expertise in wood construction has declined over the past 50 years. Shop fabrication has partially solved this problem but a new field inspection function may be necessary to assure that all details are correct in some of these new systems.
- The total value of this symposium will be appreciated in a gradual way. Integrated design will emerge as designers bring new technology into building systems. The multifaceted approach proposed several years ago (by Suddarth) in Purdue Bulletin 903 clearly is the comprehensive approach to follow. ■

Idaho conference focuses on the role of women

The College of Forestry, Wildlife, and Range Sciences at the University of Idaho, in cooperation with the Agency for International Development and Women in Development, is sponsoring a 2-day conference for professionals and others interested in international work in the natural resources fields. The conference will be held Mar. 8 and 9 on the University of Idaho campus. Participants are expected from all over the United States.

The focus of the conference will be on the role of women and their professional contributions to development projects, usually in less developed countries. There will also be sessions on specific development projects, how to find and fund foreign work, and how to prepare to contribute to a technical team abroad.

Topics include forestry, fisheries, range management, wildlife, and all aspects of outdoor recreation.

In addition to conference proceedings, a directory of professional women in natural resources will be published and a network established.

A $5 conference fee will be charged.

For information, contact: Jo Ellen Force, Forest Resources Department; 208-885-6126 or Dixie Ehrenreich, Laboratory of Anthropology, University of Idaho, Moscow, ID 83843; 208-885-6754. ■